



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,732	11/28/2000	Jonathan D. Courtney	SUNIP506/P4151	7770
22434	7590	08/26/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			HUYNH, SON P	
P.O. BOX 70250			ART UNIT	PAPER NUMBER
OAKLAND, CA 94612-0250			2611	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/724,732	COURTNEY ET AL.	

  

<b>Examiner</b>	<b>Art Unit</b>	
Son P. Huynh	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 13 June 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1,4-14,16-21 and 23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,4-14,16-21 and 23 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 28 November 2000 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/9/2005 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 4-14, 16-21 and 23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show detailed label the blocks of figures 1-4 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with

37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 19-21 recite a computer program per se (i.e. a data structure) which is functional descriptive material. The claimed computer program (data structure) does not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention. See MPEP 2106 IV B 1 (a).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 4-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fries (US 6,317,885) in view of Smyers et al. (US 5,991,520).

Regarding claim 1, Fries discloses a receiver (set top box 28 and television 30 at subscriber location – figures 1, 3) for accessing selected portions of synchronized data (video program, page) transmitted by a broadcaster (head end 22 – figure 2) in a broadcast system (20 – figure 1), the receiver comprising:

a synchronized data accessing system (set top box 28) capable of providing an application program (e.g. browser 62) with access to synchronized data transmitted by the broadcaster in the broadcasting system (browser 62 access to video data/page data transmitted by the head end – col. 6, line 35-col. 7, line 53), the synchronized data accessing system including an application programming interface (API 66) which can be used by the application program (web browser) as an interface to the synchronized data accessing system (figure 3, col. 5, lines 19-23; col. 6, lines 35-43; col. 9, lines 34-55). the API (66) can also be used by the application program to provide interface for a selected portion of synchronized data transmitted by said broadcaster (e.g. browser places a call through the API 66 for video channel, or information transmitted by the head end – col. 5, lines 19-23) and wait for a notification (e.g. wait for “error page” or information indicates that the program is currently available program or available in the future) that notifies the application program that the selected portion of synchronized data is available and can be accessed by the application program (displaying “error” page, pop up window on the browser (col. 18, lines 10-22), Since indication of

availability of program on selected video channel, information is displayed on the screen (col. 15, lines 15-32; col. 18, lines 7-22) the system inherently comprises a listener to determine whether the selected portion of synchronized data is available for access, and notifies the application program that the selected portion of synchronized data can be accessed at a point of access (time that the video program/information is available – col. 18, lines 7-22) which can be linked to the listener when the listener determines that the selected portion of synchronized data is available and can be accessed, thereby allowing the application program to access the selected portion of synchronized data at the point of access (e.g. allowing the browser to display the selected program/information at the time the program is available by tuning to the selected channel– col. 18, lines 7-23) without having to monitor the data transmitted by the broadcaster for broadcast of the selected program of synchronization data (the API controls the tuner to tune to the selected video channel and the filters identifies the selected data and provides the selected data to the browser for display (col. 5, lines 20-58; col. 9, lines 42-50). However, Fries does not specifically disclose the application program uses the application programming interface to initiate a listener for a selected portion of synchronized data.

Smyers discloses the application program uses the application program interface to initiate a listener for a selected portion (the application uses the API to pass a descriptor or to request a channel for transferring data – col. 5, line 60-col. 6, line 30). Smyers further discloses the application program access the selected portion of transferred data

at the point of access without having to monitor the data transmitted by video source for providing of the selected portion of transferred data (API, with transaction generator implemented in software within the API 20, monitors the buffers and notifies the application of a particular buffer when data in the particular buffer is ready to read – col. 7, line 60-col. 8, line 21; col. 9, lines 54-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fries to use the teaching as taught by Smyers in order to improve efficiency of the system as the application can perform other tasks while the transfer is taking place (col. 10, lines 5-14).

Regarding claim 4, Fries in view of Smyers teaches a receiver as discussed in the rejection of claim 1. Fries further discloses the browser uses API for interfacing the browser (62) to the operating system of the set top box (col. 5, lines 19-23; col. 6, lines 35-42). The API is provided to control the tuner and selection of program elements in the MPEG2 stream and the pages displayed on browser (col. 9, lines 42-56). An "error" page or pop up window is provided and displayed on the browser to indicate if the video channel/information is currently available or not (col. 15, lines 17-22, col. 18, lines 6-22). Thus, the listener (e.g. tuner, PID filters or any device/software that determines/provides error page, pop up window) sends a notification (error page, pop up window, etc.) to the application program (browser 62) to notify the application program that the selected portion of synchronized data can be accessed at the point of access (indication to notify the browser that the selected program in the selected channel/selected information can

be accessed immediately (if the time that indicate the program is currently available) or the program is available at particular time in the future – col. 18, lines 10-22).

Regarding claims 5-8, Fries further discloses the notification can be a program guide pop up window and prompted to add the program to a timer for timed viewing thereof (col. 18, lines 6-22). Inherently, the notification includes information associated with the selected portion of synchronized data such as timestamp (i.e. start time of program indicated on the program guide) and length of data, which is available for access (i.e. duration of program indicated on the program guide).

Regarding claim 9, Fries further discloses if the information is not available or valid, then link to an “error” page in the carousel, which will direct the user to call the service provider (col. 15, lines 17-32) broadly reads on the claimed feature of “accessing system additionally provides error handling information.

Regarding claim 10, the claimed feature of “the synchronized data accessing system provides information that can be used by said application program to access the selected portion of synchronized data in segments” is broadly met by the receiving system (set top box and television display – figure 3) provides information (meta data, program guide, etc.) that can be used by the browser to access the selected program/page data in page by page, or packet by packet of MPEG2 stream, or video program element (see Fries, col. 6, lines 5-15, col. 7, lines 34-52; col. 9, lines 35-50).

Regarding claim 11, Fries further the synchronized data accessing system (set top box and television display – figure 3) further includes a data accessor (i.e. browser 62) and a data provider (e.g. API 66, RAM, DRAM, processor, video recorder, or any device that provides data to the browser – figure 3).

Regarding claim 12, Fries in view of Smyers teaches a receiver as discussed in the rejection of claim 11. Smyers further disclose data accessor (application program) can send a request to resynchronize data (col. 7, lines 35-60; col. 31, lines 1-3, lines 32-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fries to use the teaching as taught by Smyers in order for resynchronization to a predetermined specific point in time within the data during transfer (col. 7, lines 35-52).

Regarding claim 13, Fries further discloses “error” page is provided to browser (through API – col. 5, lines 19-23; col. 6, lines 35-43; col. 15, lines 17-21). Thus, the data provider (API, RAM, DRAM, processor, or any device that provides data for display on the browser) sends an error notification (i.e., error page) to the data accessor (browser).

6. Claims 14, 16-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smyers et al. (US 5,991,520) in view of Fries (US 6,317,885).

Regarding claim 14, Smyers discloses a method of accessing synchronized data transmitted from a video source in a video processing system (data transmitted from the video source such as video recorder (52) or camera (50) – figure 3), the method comprising:

providing an application program interface (API 20 with generator 38 implemented in it – col. 9, lines 54-65) which can be used by an application program (22,24 – figure 2) as an interface for accessing synchronized data transmitted by the video source (camera or video recorder), wherein the application program interface includes a listener interface (channel interface or buffer descriptor interface- col. 5, line 60-col. 6, line 46) which can be used by the application program (22,24) to generate a listener (channel or buffer descriptors – col. 5, line 60-col. 6, line 46);

causing the listener interface to generate a listener (request the API to allocate a channel or assigning a linked list of buffer descriptors to the API – col. 5, line 60-col. 6, line 46);

acquiring by the application program the listener (application program (22,24) acquires a allocated channel or linked list of buffer descriptors – col. 5, line 60-col. 6, line 46; col. 9, lines 40-65);

acquiring by the application a point of access where synchronized data can be access (application program obtains a notification of a particular buffer that is ready to be accessed – col. 9, lines 3-19);

determining by the listener that synchronized data is available for access (buffer descriptors or channel determines that the transferred data in particular buffer is filled and ready to be accessed – col. 6, lines 35-47; col. 8, lines 6-21; col. 9, lines 5-19);

linking the listener interface to the point of access interface and accessing by application program the point of access (linking the channel/buffer descriptor to particular buffer that is filled to access the data in the buffer by the application program – col. 9, lines 10-19);

notifying the application program by the listener that synchronized data can be accessed at the point of access (the channel/buffer descriptor notifies the application program that a particular buffer is filled and ready to be accessed- col. 8, lines 4-21; col. 9, lines 3-19);

accessing by the application program the synchronized data at the point of access (application program access the data in appropriate buffer at appropriate time period – col. 7, lines 15-25, col. 9, lines 3-19). Smyers further discloses the IEEE 1394 supports a six bit channel number which is broadcast with a stream of data across the bus structure 28). However, Smyers does not specifically disclose the video data is transmitted by a broadcaster.

Fries discloses a broadcaster (i.e., head end 22 – figure 2) for broadcast synchronized data (video data and/or page data), and using API (66) and application program (browser 62) to access the synchronized data (figures 3, col. 5, lines 37-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Smyers to use the teaching as taught by Fries in order to provide video data from video source to multiple users/receivers thereby improve efficiency in data transmission system.

Regarding claim 16, Smyers further discloses sending a notification by the listener to the application program to indicate that data is ready for access (notify the application that the data in appropriate buffer is ready for access – col. 8, lines 1-21; col. 9, lines 3-19).

Regarding claims 17-18, the limitations as claimed correspond to the limitations as claimed in claims 8, 13, and are analyzed as discussed with respect to the rejection of claims 8, 13.

Regarding claim 19-21, the limitations of the claimed computer programmable medium correspond to the limitations of the method as claimed in claims 14, 16-17, and are analyzed as discussed with respect to the rejection of claims 14, 16-17.

Regarding claim 23, the limitations of the receiver as claimed correspond to the limitations of the method as claimed in claim 14, and are analyzed as discussed with respect to the rejection of claim 14.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Agesen et al. (US 5,909,579) discloses method and apparatus for encoding and decoding delta encoded information to locate live pointers in program data stacks.

Engstrom et al. (US 6,134,602) discloses application programming interface enabling application programs to group code and data to control allocation of physical memory in virtual memory system.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 8:30-6:00.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300

Art Unit: 2611

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPH  
August 11, 2005



HAI TRAN  
PRIMARY EXAMINER